

yw



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,386	09/11/2003	Kyu-Chan Roh	P-0579	3800
34610	7590	01/25/2005	EXAMINER	
FLESHNER & KIM, LLP			LE, VU	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	

2613

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,386

Applicant(s)

ROH, KYU-CHAN

Examiner

Vu Le

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 5-15 is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 1, 4-5 are objected to because of the following informalities:
 - a. Claim 1, line 2, replace "whch" with - - which - -;
 - b. Claim 1, lines 2-3, the nomenclature used here is inaccurate. For example, a quantizer does not perform DCT per se, DCT is a separate and distinct operation different from quantization. It is recommended that lines 2-3 be rewritten as "a first quantizer which quantizes a resulting DCT value from a motion compensated image";
 - c. Claim 1, line 5, after "an inverse-quantizer which", replace "re-quantizes" with - - inverse-quantizes - -; this change is needed to emphasize inverse quantization, not re-quantization or double quantization as the claim language implies;
 - d. See also claim 5 for similar problems as above;
 - e. Claim 4, line 2, replace "A process of" with - - processor - - to comply with proper antecedent basis to "said processor" at line 3. Also, the change is necessary to remedy improper hybrid claim format i.e., both product and process are claimed without clear indication which statutory class is intended. Appropriate correction is required.

Specification

2. The disclosure is objected to because of the following informalities:

On page 10, 2nd para, lines 3-6, amendment to the description is necessary. The problems are similar to those pointed out in the claim objection of claim 1 above. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 4 is rejected under 35 U.S.C. 102(a) & (e) as being anticipated by Chen et al, US 6,480,547.

Re claim 4, Chen et al discloses a fine granularity scalability encoding apparatus, (fig. 2) comprising: a process of (i.e. processor) (250) which calculates a quantization error ("R" output of 254) based on a difference between a signal prior to quantization (output of 214) and a decision level of a quantizer (output of 216), said processor (250) not coding sign information during encoding in an enhancement layer (col. 7, line 59 – col. 8, line 21; the sign of the residual signal "R" is not encoded as disclosed).

Allowable Subject Matter

5. Claims 8-15 are allowed.

Art Unit: 2613

6. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 8 & 14, the prior art of record does not anticipate or render obvious the "fine granularity scalability decoding" apparatus and method as claimed. Especially the limitations of "inversely quantizing the added/subtracted value; restoring an image transmitted from the enhancement layer by performing an inverse discrete cosine transforming (IDCT) on the inversely quantized value by block units; and restoring an enhanced image by clipping the inverse discrete cosine transformed image values in the range of 0 ~ 255".

Re claims 1, 5, 8, 10 and 12, the prior art of record does not anticipate or render obvious the "fine granularity scalability encoding" apparatus and method as claimed. Especially the limitations of "re-quantizing the quantized value; inverse-quantizing the re-quantized value; obtaining a difference between a value of N times the re-quantized value and the inverse-quantized value; obtaining a difference between the first-quantized value and the inverse-quantized value; and subtracting output values obtained in the obtaining steps".

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vu Le
Primary Examiner
AU 2613
(703) 308-6613
Vu.Le@uspto.gov